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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,124	08/30/2001	William J. Purpura	7784-00340	9306
7590	02/19/2004		EXAMINER	
Mark D. Elchuk, Esq. Harness Dickey & Peirce P.L.C. 5445 Corporate Drive #400 Troy, MI 48098			NGUYEN, DANNY	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/943,124	PURPURA, WILLIAM J.	
	<b>Examiner</b> Danny Nguyen	<b>Art Unit</b> 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 October 2003.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 18 and 19 is/are allowed.
- 6) Claim(s) 1-3,5-9,11-17 is/are rejected.
- 7) Claim(s) 4 and 10 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
 a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)           | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed 10/28/2003 have been fully considered and are persuasive.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 7-9, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Small (USPN 6,232,675) in view of Kubota et al (USPN 5,357,142).

Regarding to claims 1, 14, Small discloses a power distribution system (see fig. 2B) comprises a power input port (65); at least three power output ports (51A, 51B, 53A, 53B), each having a separate, re-settable over-current protection circuit (47A, 47B, see col. 5, lines 57-64), each of the over-current protection circuits having its own maximum current rating (20 amp); and a port switch (67) configured to provide power from the input port to selectable combination of one or more the output ports (51A ,53A, and 51B and 53B respectively), including at least one combination of two or more the output ports (e.g. the outputs 51A and 53A), but Small does not disclose the port switch restricted from selecting all the output ports simultaneously. Kubota et al disclose a power supply circuit (fig. 1) comprises a switching circuit (such as circuit switch E) that restricts from selecting all the output ports simultaneously. It would have been obvious

to one of ordinary skill in the art at the time the invention was made to have modified the switching circuit of Small with the switching circuit of Kubota et al in order to simplify the structure and improve greatly production (col. 2, lines 41-50).

Regarding to claims 2, 3, Small discloses the port switch is further configured to restrict selection of any combination of the output ports having over-current protection circuits with maximum current ratings totaling more than a pre-selected maximum current (see col. 4, lines 47-55).

Regarding to claim 7, Small discloses a power distribution system and a method (see fig1. 1 and 2B) comprises a power source (see col. 3, lines 42-45) to provide power to a plurality of seat connectors (connector 20); a branch level over-protection circuits having a maximum current rating (circuit breaker 23 with maximum current rating 2.5 amp, fig. 1) and providing current protection for current drawn in a branch of the system comprising a plurality of seat connectors; and a power splitter having a power input port (78) configured to receive power one of the seat connectors; at least three power output ports(51A, 51B, 53A, 53B), each having a separate, re-settable over-current protection circuit (47A, 47B, see col. 5, lines 57-64), each of the over-current protection circuits having its own maximum current rating (20 amp); and a port switch (67) configured to provide power from the input port to selectable combination of one or more the output ports (51A and 53A and 51B and 53B respectively, see abstract), including at least one combination of two or more the output ports, but Small does not disclose the port switch restricted from selecting all the output ports simultaneously. Kubota et al disclose a power supply circuit (fig. 1) comprises a

Art Unit: 2836

switching circuit (such as circuit switch E) that restricts from selecting all the output ports simultaneously. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the switching circuit of Small with the switching circuit of Kubota et al in order to simplify the structure and improve greatly production (col. 2, lines 41-50).

Claims 8, 9, and 15 repeat the limitations of claims 2 and 3; therefore they are rejected accordingly.

3. Claims 5,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Small in view of Kubota et al, and further in view of Potega (USPN 6,459,175). Small and Kubota et al disclose all limitations of claim 1 except for having the input ports and the output ports which are selected from the group of 12 VDC power connectors and ARINC 628 connection points. Potega discloses the input ports and the output ports are selected from the group of 12 VDC power connectors and ARINC 628 connection points (see col. 48, lines 11-18 and 53-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the input and output ports of Small and Kubota et al with the input ports and the output ports which are selected from the group of 12 VDC power connectors and ARINC 628 connection points in order to provide a better connection.

4. Claims 6, 12, 13, 16, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Small in view of Kubota et al.

Regarding to claims 12, 13 and 16, Small and Kubota et al do not teach the power distribution system installed on the airplane. However, It would have been

obvious to ordinary skill in the art at the time the invention was made to use the power system of Small and Kubota et al to install on the airplane in order to provide more conveniences for passengers who want to use more than one devices at each time.

Regarding to claims 6 and 17, Small and Kubota et al do not disclose that the resettable circuit breaker can be replaced with different current rating. However, Small and Kubota et al disclose the resettable circuit breakers are separate and independent circuit breaker (see col. 5, lines 57-58, see col. 1, lines 17-30). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow different electrical devices with different power requirements could be used.

***Allowable Subject Matter***

5. Claims 18 and 19 are allowed
6. Claims 4 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

7. Applicant's arguments filed 10/28/2003 have been fully considered and are persuasive.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9318 for regular communications and (703)-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

pr  
DN  
January 26, 2004

  
BRIAN SIRCUS  
SUPERVISOR  
TECHNICIAN  
EXAMINER  
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